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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/295,718	04/21/1999	STEVEN M. BLUMENAU	EO295/7087/R	7529

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ROBERT PLOTKIN
C/O WOLF GREENFIELD & SACKS PC
FEDERAL RESERVE PLAZA
600 ATLANTIC AVENUE
BOSTON, MA 022102211

EXAMINER

WILLETT, STEPHAN F

ART UNIT	PAPER NUMBER
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2141

DATE MAILED: 12/24/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.
09/295,718

Applicant(s)
Blumenau et al.

Examiner
Stephan Willett

Art Unit
2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Sep 5, 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20, 34-50, and 62-77 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20, 34-50, and 62-77 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

Art Unit: 2141

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U. S.C. 102(e) that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

2. Claims 1, 7-8, 10-11, 34-38, 41, 43, 62, 69, 71 are rejected under 35 U.S.C. 102(e) as being anticipated by Cannon et al. with Patent Number 6,167,408

3. Regarding claim(s) 1, 34, 62, Cannon teaches updating code and configuration information for distributed applications. Cannon teaches storing first configuration information as to how to access a computer resource, col. 14, lines 23-24. Cannon teaches determining a second access configuration, col. 14, lines 33-35. Cannon teaches comparing the two configurations for differences, col. 16, lines 29-33 and changes are reported. Cannon teaches applying the second configuration when it differs from the older configuration, col. 17, lines 47-50. Cannon teaches differing manners of accessing a resource, col. 6, lines 9-11. Cannon teaches identifiers to enable access to a resource as “reference characteristics” to “data storage system where each node is a data storage server”, col. 6, lines 54-56 in Tables 1-3, as “where the managed unit is a storage server, the operations may involve satisfying storage access requests of one or more hosts, clients, or other machines (not shown) coupled to the managed unit”, col. 11-12, lines 65-1, of “operating characteristics to guide its operation”, col. 6, lines 33-34. Therefore,

Art Unit: 2141

by the above rational, the above claim(s) are rejected.

4. Regarding claims 2-3, 35-36, 63, Cannon teaches rebooting as part of the reconfiguration process, col. 10,2-3.

5. Regarding claims 7-8, 10-12, 37-38, 41, 43, 64-65, 68, 70, Cannon teaches more identifiers to enable access to a resource, Table 2.

Claim Rejections - 35 USC § 103

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

lines 2-3. Thus, the above claim limitations are obvious in view of the combination.

8. Claims 14, 45, 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cannon et al. with Patent Number 6,167,408 in view of DeKoning et al. with Patent Number 6,178,520.

Art Unit: 2141

9. Regarding claim(s) 14, 45, 72, teaches updating code and configuration information for distributed applications. Cannon teaches storing first configuration information as to how to access a computer resource, col. 14, lines 23-24. Cannon teaches determining a second access configuration, col. 14, lines 33-35. Cannon teaches comparing the two configurations for differences, col. 16, lines 29-33 and changes are reported. Cannon teaches applying the second configuration when it differs from the older configuration, col. 17, lines 47-50. Cannon teaches differing manners of accessing a resource, col. 6, lines 9-11. Cannon teaches identifiers to enable access to a resource, Table 1-3. Cannon teaches rebooting type operations as “powered-up, restarted, or otherwise begins operation”, col. 10, line 2, but specifically not a reinitialization type operation. Cannon teaches the invention in the above claim(s) except for explicitly teaching a configuration manner without reinitializing. In that Cannon operates to reconfigure data access updates, the artisan would have looked to the system configuration and reconfiguration arts for details of implementing access to resources. In that art, DeKoning, a related network updating system, teaches “mapping functions”, col. 7, lines 11-12 in order to provide efficient updates. DeKoning specifically teaches “hot-swap monitor”, col. 8, lines 1-2. Clearly, reinitialization is not required. Further, DeKoning suggests “I/O requests are translated into appropriate block transfer requests”, col. 7, lines 19-20 which will result from implementing his hot-swap. The motivation to incorporate a hot-swap insures that the system is not interrupted. Thus, it would have been obvious to one of ordinary skill in the art to incorporate a hot swap as taught in DeKoning into the upgradable system described in the Cannon patent because Cannon operates with methods to access resources in a distributed system and DeKoning suggests that

Art Unit: 2141

optimization can be obtained with a hot-swap. Therefore, by the above rational, the above claim(s) are rejected.

10. Claims 1-20, 34-50 and 62-77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ma et al. with Patent Number 5,920,725 in view of Ha with Patent Number 6,175,919.

11. Regarding claim(s) 1, 34, 62, Ma teaches updating code and configuration information for distributed applications. Ma teaches storing first configuration information as to how to access a computer resource, col. 7, lines 6-13. Ma teaches determining a second access configuration, col. 7, lines 15-18. Ma teaches comparing the two configurations for differences as “some of the existing object instances now no longer match their modified object class definitions”, col. 7, lines 19-20 and changes are reported. Ma teaches applying the second configuration when it differs from the older configuration, col. 7, lines 47-50. Ma teaches differing manners of accessing a resource, col. 9-10, lines 66-4. Ma teaches identifiers to enable access to a resource, col. 13-14, lines 62-23. Ma teaches the invention in the above claim(s) except for explicitly teaching a configuration manner to access a resource. In that Ma operates to reconfigure data access updates, the artisan would have looked to the system configuration and reconfiguration arts for details of implementing access to resources. In that art, Ha, a related network updating system, teaches a “BIOS upgrade system”, col. 4, lines 6 in order to provide efficient updates. Ha specifically teaches “basic input-output system (BIOS)”, col. 1, lines 16-17. Clearly, the manner of accessing a resource is taught. Further, Ha suggests “it is possible to save time and to collectively upgrade the BIO’s of a plurality of computers”, col. 5, lines 27-28 which will result

Art Unit: 2141

from implementing his upgrading system. The motivation to incorporate different methods to access a resource insures that a diverse distributed computer network system is supported. Thus, it would have been obvious to one of ordinary skill in the art to incorporate the BIOS accessing method as taught in Ha into the upgradable system described in the Ma patent because Ma operates with methods to access mobile objects in a distributed system and Ha suggests that optimization can be obtained with access methods. Therefore, by the above rational, the above claim(s) are rejected.

12. Regarding claims 2-3, 35-36, 63, Ha teaches rebooting as part of the reconfiguration process, col. 5, lines 23-24. Thus, the above claim limitations are obvious in view of the combination.

13. Regarding claims 4, 6, 12, 37-38, 64-65, 68, 70, Ma teaches storing component information to identify a resource and configuration information, col. 8, lines 20-21. Thus, the above claim limitations are obvious in view of the combination.

14. Regarding claims 5, 39, 66, Ma teaches volumes of data associated with each resource, col. 8, lines 1-6 and in Ha at col. 4, lines 9-10. Thus, the above claim limitations are obvious in view of the combination.

15. Regarding claims 7-8, 10-11, 41, 43, 68, Ma teaches more identifiers to enable access to a resource, col. 13-14, lines 62-23..

16. Regarding claims 9, 40, 67, Ma teaches path or links to information, col. 8, lines 6-8. Thus, the above claim limitations are obvious in view of the combination.

17. Regarding claims 13, 42, 44, 69, 71, 74, Ma teaches querying or sending lists of changed

Art Unit: 2141

information, col. 8, lines 10-14. Thus, the above claim limitations are obvious in view of the combination.

18. Regarding claims 14, 45, 72, Ma teaches updating without reinitializing, col. 8, lines 7-9, 18-19 and col. 15, lines 14-15. Thus, the above claim limitations are obvious in view of the combination.

19. Regarding claims 15, Ma teaches suspending operations in form, col. 7, lines 26-34. Thus, the above claim limitations are obvious in view of the combination.

20. Regarding claims 16-17, 46-47, 73, Ma teaches a mapping entity to each resource as class updates, col. 10, lines 45-56. Thus, the above claim limitations are obvious in view of the combination.

21. Regarding claims 18, 48, 75, Ha teaches updating via ports, Fig. 4 and as via a MUX, col. 4, lines 30-32. Thus, the above claim limitations are obvious in view of the combination.

22. Regarding claims 19, 49, 76, Ma teaches using different connection to access database information, col. 8, lines 25-27. Thus, the above claim limitations are obvious in view of the combination.

23. Regarding claims 20, 50, 77, Ma teaches moving configuration data from one storage location to another, col. 11, lines 4-6. Thus, the above claim limitations are obvious in view of the combination.

Response to Amendment

24. The broad claim language used is interpreted on its face and based on this interpretation

Art Unit: 2141

the claims have been rejected, however, excellent summary for perspective.

25. The limited structure claimed, without more functional language, reads on the references provided. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

26. Applicant suggests "claim 14 was amended to clearly distinguish over the subject matter which caused the Examiner concern (e.g. a file system having capability of moving the location of data corresponding to a particular file from one volume to another)", Paper No. 14, Page 17, lines 11-12. The above argument is not commensurate with what is presently claimed and therefore will not be considered at this time. Also, it is noted that this characterization seems to contradict the argument asserted below since it sounds like changing access to data in a predetermined and expected manner, Paper No. 14, Page 20, lines 22-23. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

27. Applicant suggests "even if the operating characteristics related to manners of accessing a resource, Cannon does not determine a second manner of accessing the computer system resource", Paper No. 14, Page 20, lines 19-21. The references should not be read in a vacuum, the teachings are not mutually exclusive, and must be taken in context of what was reasonable based on the subject matter as a whole as would have been understood at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. As the new references highlight and as in applicant's claims, configuration checks are expected upon rebooting and a common approach as taught is to reconfigure without re-initializing. The limited interpretation of the teachings of the cited references is not reasonable since they clearly include identifier type characteristics of how to access a resource. Cannon teaches identifiers as

Art Unit: 2141

“reference characteristics” to “data storage system where each node is a data storage server”, col. 6, lines 54-56 in Tables 1-3, as “where the managed unit is a storage server, the operations may involve satisfying storage access requests of one or more hosts, clients, or other machines (not shown) coupled to the managed unit”, col. 11-12, lines 65-1, of “operating characteristics to guide its operation”, col. 6, lines 33-34. The references teach identifying new ways to access resources as their characteristics change with identifiers of how to access the resource or data.

Applicant suggests “the Office Action relate[s] to characteristics which define system administration functions”, Paper No. 14, Page 20, lines 26-27. This is correct since the references primarily describe the process of how to update identifiers or access routines to resources or data, not that the process clearly applies to identifiers to access resources or data.

Thus, in an effort to advance prosecution, it is suggested that any novelty in the update method be claimed. Thus, Applicant’s arguments can not be held as persuasive regarding patentability.

28. Applicant suggests “Cannon discloses imposing changes in those characteristics, and not responding to changes in the characteristics”, Paper No. 14, Page 23, lines 2-4. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the cited portions of the references and relevant portions of the reference. Again, such a limited interpretation of the teachings of Cannon is not reasonable. Thus, Applicant’s arguments can not be held as persuasive regarding patentability

29. Applicant suggests DeKoning teaches “upon detection of an error condition, test sequences are invoked ... failed I/O operations may be mapped to block addresses on a new drive”,

Art Unit: 2141

Paper No. 14, Page 23, lines 13-16. Without succeeding to the propriety of this limited characterization, DeKoning teaches access identifier changes in response to “recovering from disk drive insertion”, Paper No. 14, Page 23, line 9 due to said error. However, as discussed above, Cannon clearly makes up for any short comings. Thus, Applicant’s arguments can not be held as persuasive regarding patentability.

30. Applicant suggests “the identifiers disclosed in Ma are those used by the meta server to define attributes of a class, wherein a class is a basic program unit used by a meta server schema”, Paper No. 14, Page 25, line 3-4. However, upon further reading Ma teaches “folders also perform management of objects within the folder, such as creation of new objects instances and deletion of existing object instances at run-time”, col. 13, lines 44-47 which clearly effects how a resource is identified, thus such a limited interpretation of the teachings is not reasonable. The references should not be read in a vacuum, the teachings are not mutually exclusive, and must be taken in context of what was reasonable based on the subject matter as a whole as would have been understood at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. For example, Ma teaches “more complex changes such as adding a new routine require pasting program code”, col. 7, lines 9-10, and objects are not just data in a database but “the reference count indicates the number of other objects that are currently communicating with the object”, col. 7, lines 32-34, these objects define a configuration to access other objects, resources, and data. Thus, Applicant’s arguments can not be held as persuasive regarding patentability.

Art Unit: 2141

Conclusion

31. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

32. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

33. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephan Willett whose telephone number is (703) 308-5230. The examiner can normally be reached Monday through Friday from 8:00 AM to 6:00 PM.

34. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley, can be reached on (703) 308-5221. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-7239.

35. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9605.

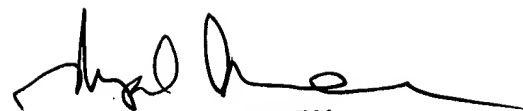
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Application/Control Number: 09/295,718

Page 12

Art Unit: 2141

November 12, 2003



RUPAL DHARIA
SUPERVISORY PATENT EXAMINER